



How to use this book

Each section provides a unique look at the recipe layout:

THE PICTURE shows young cooks what the finished product should look like, but is presented for reference only. Encourage creativity in presentation methods! If a child decides to develop his or her own spin on the recipe, support this effort! Send us a photograph of the finished product and we may include it on our website.

NUTRITIONAL INFORMATION is presented in a child-friendly format that shows why some ingredients are important for health and wellness. In this section, you won't find milligrams of sodium, for example, but your children will see why the food they are preparing is good for them.

SCIENCE, TECHNOLOGY, ENGINEERING, OR MATH (STEM) topics accompany each recipe. Read these with your children before you begin so they understand the STEM behind the final food product.

DIRECTIONS are listed with the family member's responsibility for each line item. Tasks are organized by ability or an adult's discretion:

1.  **STOP!** You must be old enough to perform this step safely (Approximately age 12 to adult for difficult tasks)
2.  **WAIT!** Think about what you're doing before you do it (Approximately age 6-11 for medium difficulty tasks)
3.  **GO!** Do this to the best of your ability (Age 5 and under for easy tasks)
4.  **COOPERATE!** Everyone can participate in this step (all ages and abilities)
5.  **ADULTS ONLY!** This is a potentially dangerous step that must be done only by responsible adults. Very few recipes include adults as vital participants. Most require that they participate as a  or any other color to fill in the age and ability gaps.
6. When two symbols appear   next to a step, the older cook guides the younger one.

We know that not every family fits these guidelines with three kids ages 13, 7, and 4, for example. Therefore, you'll need to get creative with the system:

- Photocopy the recipe page and write each child's name next to a step he or she is capable of performing.
- Take turns being red, yellow, or green.
- If you have only one child, either cook as a family with an adult or two filling in for siblings, or invite friends over for a cooking party and divide the tasks equally.
- You could designate one child to prepare the area by getting out the ingredients and supplies needed to complete the recipe.
- Take turns being the kitchen clean-up person.

Remember, the idea is to encourage cooperation, so the young cooks should be part of the selection process for who does which tasks.

THE INGREDIENTS are listed in the order that they are used in the recipe. Encourage children to double-check the recipe to make sure they have included every ingredient in the proper amount.

EQUIPMENT NEEDED is listed in a separate section. Commonly used materials such as measuring cups and spoons, are not listed. Most households have the basic materials needed to prepare food. Young chefs should understand that if they don't have the right equipment, their recipe may not turn out as they expected. You can certainly substitute items occasionally – like using a fork instead of a whisk, but that fork would be difficult to use if the recipe calls for the batter to be beaten for two minutes!

OTHER INFORMATION - At the end of the recipe is a special section for helpful hints, garnishing ideas, serving suggestions, alternative ingredients, and pictures of necessary equipment.

GLOSSARY - if you are using the digital version of this book, new or unusual terms are digitally linked to the [glossary](#) in the appendix. Readers with the bound copy can flip to the back.

4th of July Patriotic Ice Pops

Assert your independence from sugary desserts with these nutritious ice pops!



Nutritional benefits:

Blueberries contain more antioxidants than any other berry. This helps combat cancer, diabetes, and Alzheimer's.

Vanilla yogurt is rich in the good bacteria that strengthen your immune system.

Strawberries are rich in Vitamin C, which combats infections and reduces painful swelling of joints.

States of Matter

Ice pops demonstrate the three states of matter: Solid, liquid, and gas. Here's how:

When you have solid strawberries or blueberries and process them in a blender, their cell walls break down, creating liquefied berries. The water molecules in the berries trap tiny particles of the solid berries making it look like thick juice.

Freezing the berries in your ice pops returns them to their solid state. However, they won't look like the berries you put into the blender! They will take on the shape of the container you are using to create your ice pops.

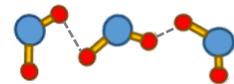
When the ice pop sits out in the sun, it will melt into a gooey mass of yogurt and berries. Your ingredients go back to liquid again! But don't eat that because the dairy products in the yogurt can spoil very quickly in the sun.

If you leave your ice pop outside in a tray for several days, it will eventually disappear. That's not because the dog ate it but because the liquid water evaporates into water vapor. Heat from the sun causes water molecules in your ice pops to float up and become part of the clouds! Solid pieces of fruit are left behind on your tray.

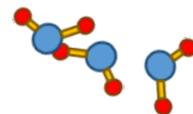
Water molecules consist of two **hydrogen** atoms and one **oxygen** atom (H₂O).



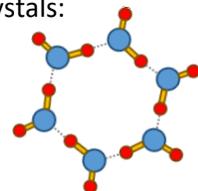
In water, they link randomly:



In water vapor, they don't link at all:



In ice, they link to form hexagon crystals:



Ingredients needed: 1 cup blueberries 1 cup strawberries ¼ cup apple juice 2 Tbsp. honey 1 8-oz container of organic vanilla yogurt	Special equipment needed: Colander Food processor or blender 6 ice pop molds or 3-oz paper cups and craft sticks Makes 6-8 ice pops, depending on the size of your mold
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DIRECTIONS

-  Remove stems from blueberries and rinse them in a colander
-  Place blueberries in the food processor or blender
-  Add 2 Tbsp. apple juice and 1 Tbsp. honey to the blender. Puree until the mixture liquefies – about 10-15 seconds.
-  Carefully pour the blueberry mixture into 6 ice pop molds.
-  Add about 2 Tbsp. yogurt to each ice pop mold.
-  Cut out the stem and core of the strawberries
-  Rinse strawberries in a colander
-  Place strawberries in the food processor or blender
-   Add 2 Tbsp. apple juice and 1 Tbsp. honey to the blender. Puree until the mixture liquefies – about 10-15 seconds.
-  Carefully pour the strawberry mixture into each ice pop mold.
-  Transfer the molds to the freezer.
-  Leave them in the freezer for at least 6 hours to harden while you clean up the kitchen, then enjoy.

Special tips:

When measuring the honey, coat the measuring spoon with a bit of oil (like spray oil). This will help the honey to release from your spoon easier.

If you don't have commercial ice pop molds, pour your mixtures into 3-ounce paper cups. Cover the cups with aluminum foil, then insert the craft sticks through the foil to keep them straight.

Thanksgiving Cranberry Orange Bread

The early pilgrims didn't use forks; they ate with spoons and their fingers.



Nutritional benefits:

Cranberries help prevent urinary tract infections. They also provide Vitamin C to help ease colds.

Orange juice also provides Vitamin C. Plus it is rich in folate, which helps with cell development as you grow.

Walnuts, when added to the recipe, contribute protein for long-term energy and Vitamin E for skin health.

Why do cranberries float?

To understand why cranberries float, you need to do some math. When an object is less dense than water, which is 1 gram per cubic centimeter, it naturally floats. The formula for density is $D=M/V$, or density equals mass divided by the volume. The mass of one gram of cranberries is only 2.37 cubic centimeters because they contain a pocket of air. Now do the math: $D = 1 / 2.37$. Therefore, the density of the cranberries is 0.421 grams per cubic centimeter. And that's less than 1, so they float!

Cranberries see several steps when they are harvested in the fall:

1. The farmer floods the cranberry bog with a foot of water.
2. Then a beater machine travels through the bog to separate the berries from the stems. This causes the berries to float.
3. A net captures all the berries and brings them to shore.
4. Cranberries are vacuumed onto a conveyor belt and into a truck.
5. Another fun thing cranberries do is bounce! Farmers test their berries by dumping them on a bounce board separator. The ones that don't bounce are rejected because they are soft or rotten.
6. The berries are then transported to a distributor who packages them into bags or boxes and sends them to your grocery store where you buy them for your recipe.

Try this: Test some cranberries to see if they float. (Don't use wet cranberries in your recipe, though!) Do your cranberries bounce? (Everybody can bounce two berries into the sink so they don't go all over your kitchen!)



Step 2 – the beater machine in a flooded bog



Step 3 – capturing the loose berries with a giant net



Step 4 - A conveyor belt loads ripe cranberries into the farm transport truck

Ingredients needed: 2 cups flour 1 cup sugar 1½ tsp. baking powder 1 tsp. salt ½ tsp. baking soda ¾ cup orange juice ½ cup oil 1 egg 1½ cups fresh cranberries	Special equipment needed: 9" x 5" loaf pan Coconut oil spray Sifter Medium mixing bowl Blender or food processor Wire rack
	Makes one loaf of bread or 12 muffins

DIRECTIONS

-  Preheat oven to 350°F.
-  Spray a 9 x 5-inch loaf pan with coconut oil spray.
-  Measure flour, sugar, baking powder, salt and baking soda into a sifter placed over a medium mixing bowl.
-   Sift dry ingredients together.
-  Mix orange juice, oil, egg and cranberries in blender or food processor.
-  Stir cranberry mixture into dry ingredients, just until moistened. DO NO OVERBEAT.
-  Spread evenly in loaf pan.
-  Bake for 55 minutes or until a toothpick inserted in the center comes out clean.
-  Clean up the kitchen while the bread bakes.
-  Cool in the pan on a wire rack for 15 minutes. Turn off the oven. Remove from pan; cool completely on the wire rack.
-  Wrap in plastic wrap until you are ready to enjoy your bread at dinner!

Other options:

If you're sure nobody at your table has a nut allergy, include ½ cup of finely chopped walnuts to the dry ingredients.

To make 12 muffins instead of bread, preheat the oven to 400°F, place paper muffin cups in a muffin pan, fill the cups ¾ full, and bake for 20 minutes. Cool on a wire rack. Freeze any leftover fresh cranberries. When you're ready to make another loaf of bread when cranberries are out of season, simply defrost and proceed with your recipe. Decrease orange juice to ½ cup, as defrosting berries adds more moisture.